

65717 to 65719—Continued.

65718. *ACACIA PENNINERVIS* Sieber.

The bark of this Australian acacia contains 18 per cent of tannic acid, according to Maiden (Useful Native Plants of Australia), and is said to endure comparatively low temperatures. The same authority states that it is a tall shrub or tree with narrow sickle-shaped phyllodia and short racemes of pale-yellow flowers.

For previous introduction see No. 62961.

65719. *HAKEA LAURINA* R. Br. Proteaceae.

A tall Australian shrub, 30 feet or less high, remarkable for its showy crimson flowers. These are in globular heads, about 2 inches in diameter, from which numerous golden yellow styles protrude an inch or so in all directions.

For previous introduction see No. 64483.

65720. *LILIUM SUTCHUENENSE* Franch. Liliaceae. Lily.

From Kew, England. Seeds presented by the Royal Botanic Garden, through Prof. E. B. Babcock, University of California, Berkeley. Received March 1, 1926.

A lily from Szechwan, western China, with a stem 3 to 5 feet high, the underground portion running along horizontally before coming to the surface. The thickly scattered leaves are linear and deep green, and the pendulous flowers, up to 20 in number, have reflexed orange-red segments spotted purplish-black and red anthers.

For previous introduction see No. 55609.

65721. *CARICA PAPAYA* L. Papaya-ceae. Papaya.

From Pakse, Laos, Indo China. Seeds presented by G. Ricau. Received March 2, 1926.

Papaya de Ceylon. Introduced for testing in the warmest parts of the United States.

65722 to 65730. *ABIES* spp. Pinaceae. Fir.

From Kansu, China. Seeds collected by J. F. Rock, Arnold Arboretum, Jamaica Plain, Mass. Received March 2, 1926. Notes by Mr. Rock.

65722. *ABIES* sp.

No. 13423. October, 1925. A tree 40 to 50 feet high, with ascending branches, found in the Maerhku Valley, northern slopes of the Minshan. The needles are glossy on both sides.

65723. *ABIES* sp.

No. 13425. A tree 60 to 80 feet high, found in the Maerhku Valley, northern slopes of the Minshan, at an altitude of 10,000 feet, October, 1925. The needles are long, wiry, and glaucous, the cones 2 inches long, and the scales broad and purplish black.

65724. *ABIES* sp.

No. 13429. From the Maerhku Valley, northern slopes of the Minshan, at an altitude of 10,600 feet, November, 1925. A tree 80 feet high, with long leaves, glossy on both sides; cones $2\frac{1}{4}$ inches or more long, and broad purplish black scales.

65725. *ABIES* sp.

No. 13436. Djrakana, Tebbu country, November, 1925. A tree 80 feet high, growing at an altitude of 10,000 feet. The long needles are glossy whitish beneath, the cones $2\frac{1}{4}$ inches long, and the scales broad with a short protruding mucro.

65722 to 65730—Continued.

65726. *ABIES* sp.

No. 13447. November, 1925. A tree 40 to 50 feet high, found on Mount Koangkai, North Tebbu country, at an altitude of 12,000 feet. The curved, emarginate leaves, glaucous beneath, are very large; the cones are 3 inches in length and the scales broad, with a remarkably large foliaceous mucro.

65727. *ABIES* sp.

No. 13448. November, 1925. A tree 40 feet high, growing at an altitude of 11,000 feet on Mount Koangkai, North Tebbu country. The needles and cones are smaller than my No. 13447 [No. 65726], but the scales are similar.

65728. *ABIES* sp.

No. 13451. A tree 60 to 80 feet high, found at Djrakana, Tebbu country, at an altitude of 11,000 feet, November, 1925. The leaves are thick, broadly sessile or slightly petiolate, and the cones are 2 inches or more long.

65729. *ABIES* sp.

No. 13454. A tree 80 feet high, found at Djrakana, Tebbu country, at an altitude of 11,000 feet, November, 1925. The large thick leaves are glaucous above and dull green beneath, and the purplish black cones, $1\frac{1}{4}$ inches long, are mucronate.

65730. *ABIES* sp.

No. 13466. A tree 100 to 150 feet high, growing on Lienhoa Mountain, central Kansu, at an altitude of 12,500 feet, October, 1925. The large blunt leaves are glaucous beneath, and the cones, 2 inches or more long, are purplish black.

65731. *HYDROCARPUS ANTHELMINTHICA* Pierre. Flacourtiaceae.

From Dalat, Anam, Indo-China. Seeds presented by R. Isl. Received March 2, 1926.

The maikrabao, as this species is called in Siam, where it is native, is a vigorous, graceful tree 30 to 60 feet high, with large leathery leaves up to a foot in length, pale yellowish above and shining green below. The rose or purplish flowers are in few-flowered racemes, and the large round fruits, about 3 inches in diameter, contain each about 80 oval seeds from which a fatty oil is expressed. In its physical characteristics and chemical composition this oil closely resembles chaulmoogra oil, which is used with great success in the treatment of leprosy. Like the true chaulmoogra oil (obtained from *Turakogenos kurzi* King), this consists to a large extent of the glyceryl esters of chaulmoogric and hydrocarpic acids, and it may therefore be inferred that it possesses similar medicinal value.

For previous introduction see No. 58592.

65732. *CASSIA NODOSA* Buch.-Ham. Caesalpiniaceae.

From Assam, India. Seeds presented by Mrs. S. A. D. Boggs, Louisville, Ky., through F. L. Mulford, Bureau of Plant Industry. Received March 1, 1926.

Pink and white shower. This magnificent flowering tree is one of the most commonly cultivated ornamental plants in Honolulu, where it is much used for street planting. It is a moderate-sized deciduous tree, with long drooping branches and glossy leaves; during May and June it bears a profusion of beautiful bright-pink rose-scented flowers which are in dense clusters on long stalks. It is native from the eastern Himalayas to the Malay Islands and the Philippines.

For previous introduction see No. 54984.